

computer instructions embodies all or part of the functionality previously described herein with respect to the invention. Those skilled in the art will appreciate that such computer instructions can be written in a number of programming languages for use with many computer architectures or operating systems. Further, such instructions may 5 be stored using any memory technology, present or future, including, but not limited to, semiconductor, magnetic, optical or other memory devices, or transmitted using any communications technology, present or future, including but not limited to optical, infrared, microwave, or other transmission technologies. It is contemplated that such a computer program product may be distributed as a removable media with 10 accompanying printed or electronic documentation, e.g., shrink wrapped software, preloaded with a computer system, e.g., on system ROM or fixed disk, or distributed from a server or electronic bulletin board over a network, e.g., the Internet or World Wide Web.

Although various exemplary embodiments of the invention have been disclosed, 15 it will be apparent to those skilled in the art that various changes and modifications can be made which will achieve some of the advantages of the invention without departing from the spirit and scope of the invention. It will be obvious to those reasonably skilled in the art that other components performing the same functions may be suitably substituted. Further, the methods of the invention may be achieved in either all 20 software implementations, using the appropriate processor instructions, or in hybrid implementations which utilize a combination of hardware logic and software logic to achieve the same results.

What is claimed is:

1 1. In a computer-aided design environment, a method for ensuring consistency of
2 design rule application among a plurality of CAD tool programs, each design rule
3 defining a design characteristic, the method comprising:
4 (a) creating a ~~global~~ design rule definition file including at least one ~~global~~
5 variable having a design rule characteristic assigned thereto;
6 (b) providing a technology file containing a reference to the ~~global~~ variable;
7 (c) initializing one of the CAD tool programs ~~which utilizes the global variable~~ with the technology file reference to the ~~global~~ variable; and
8 (d) conforming the CAD tool program to modifications in the design rule.

1 2. The method of claim 1 wherein (d) comprises:
2 (d.1) ~~redefining the value of the global variable in the global design rule~~
3 definition file in accordance with modifications to the design rule;

1 3. The method of claim 2 wherein (d) further comprises:
2 (d.2) determining whether any modifications have occurred to the design rule.

1 4. The method of claim 1 wherein the CAD tool program and the global design rule
2 definition file are written in the same language.

1 5. The method of claim 1 wherein the CAD tool program and the global design rule
2 definition file are not written in the same language.

1 6. The method of claim 5 wherein the global design rule definition file is in a text
2 format and wherein (c) further comprises:
3 (c.1) translating the global variable into the language of the CAD tool program.

1 7. The method of claim 1 wherein (a) further comprises:

2 (a.1) creating a global design rule definition file comprising a plurality of global
3 variables, each global variable having a design rule characteristic
4 assigned thereto.

1 8. In a computer-aided design system having at least one memory and adhering to
2 a plurality of design rules, each design rule defining a design characteristic, a
3 system for ensuring consistency of design rule application among a plurality of
4 CAD tool programs, the system having a memory and comprising:
5 A. a global design rule definition file stored in the memory and including at
6 least one global variable having a design rule characteristic assigned
7 thereto;
8 B. a technology file stored in the memory and containing a reference to the
9 global variable;
10 C. at least one CAD tool program stored in the memory and which utilizes
11 the global variable; and
12 D. means for ensuring that the CAD tool program utilizes the current design
13 rule changes.

1 9. The system of claim 8 wherein the means for ensuring comprises:
2 means for initializing the CAD tool program which utilizes the global
3 variable with the technology file reference to the global variable.

1 10. The system of claim 5 wherein the CAD tool program and the global design rule
2 definition file are written in the same language.

1 11. The system of claim 8 wherein the CAD tool program and the global design rule
2 definition file are not written in the same language.

1 12. The system of claim 11 wherein the global design rule definition file is in a text
2 format and the system further comprises program code configured to translate
3 the global variable into the language of the CAD tool program.

1 13. The system of claim 1 wherein the global design rule definition file comprises a
2 plurality of global variables, each global variable having a design rule
3 characteristic assigned thereto.

1 14. A computer program product for use with a computer system, the computer
2 system capable of executing computer-aided design programs, the computer
3 program product comprising a computer usable medium having program code
4 embodied in the medium, the program code comprising:
5 (a) program code for defining in a global design rule definition file at least one
6 global variable having a design rule characteristic assigned thereto;
7 (b) program code defining a technology file containing a reference to the
8 global variable;
9 (c) program code for initializing one of the CAD tool programs which utilizes
10 the global variable with the technology file reference to the global variable;
11 and
12 (d) program code for redefining the value of the global variable in the CAD
13 tool program in accordance with modifications to the design rule
14 characteristic assigned to the global variable in the global design rule
15 definition file.

1 16. A computer program product for use with a computer system, the computer
2 system capable of executing computer-aided design programs, the computer
3 program product comprising a computer usable medium having program code
4 embodied in the medium, the program code comprising:
5 A. program code for performing a computer-aided design function with a
6 value of a global variable representing a design rule characteristic;
7 B. program code for referencing the value of the global variable in a
8 technology file; and
9 C. program code for utilizing the value of the global variable received from
10 the technology file to perform the computer-aided design function.

1 16. In a computer-aided design system having a memory, a method for ensuring
2 consistency of design rule application among a plurality of CAD tool programs,
3 each design rule defining a design characteristic, the method comprising:
4 (a) creating a global design rule definition file in the memory, the global
5 design rule definition file including at least one global variable having a
6 design rule characteristic assigned thereto;
7 (b) providing at least one program statements within one of the CAD tool
8 programs which references a global variable within the global design rule
9 definition file; and
10 (c) conforming the CAD tool program to modifications in the design rule
11 characteristic.

12 17. The method of claim 1 wherein (c) comprises:
13 (c.1) redefining the value of the global variable in the global design rule
14 definition file in accordance with modifications to the design rule
15 characteristic;

16 18. A computer data signal embodied in a carrier wave:
17 A. program code for performing a computer-aided design function with a
18 value of a global variable representing a design rule characteristic;
19 B. program code for referencing the value of the global variable in a global
20 design rule definition file; and
21 C. program code for utilizing the value of the global variable received from
22 the global design rule definition file to perform the computer-aided design
23 function.

24 19. The system of claim 16 wherein the global design rule definition file comprises a
25 plurality of global variables, each global variable having a design rule
26 characteristic assigned thereto.

1 20. The system of claim 14 wherein the global design rule definition file comprises a
2 plurality of global variables, each global variable having a design rule
3 characteristic assigned thereto.